A NEW SPECIES OF ORIBATID MITE, *AUSTRACHIPTERIA PULLA*, FROM SHIKOKU, WEST JAPAN

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Synopsis

AOKI, Jun-ichi (Department of Soil Zoology, Institute of Environmental Science and Technology, Yokohama National University, Yokohama, 240 Japan) and Yoshiyuki HONDA, (Entomological Laboratory, College of Agriculture, Ehime University, Matsuyama, 790 Japan): A new species of oribatid mite, *Austrachipteria pulla*, from Shikoku, west Japan. *Acta arachnol.*, 33: 29-33 (1985).

The second representative of the genus *Austrachipteria* (Oribatida: Achipteriidae), *Austrachipteria pulla* sp. n., was described from mosses growing on tree trunks. The new species is readily distinguishable from the type-species from Australia by the shape of lamellar cusps and pteromorphae.

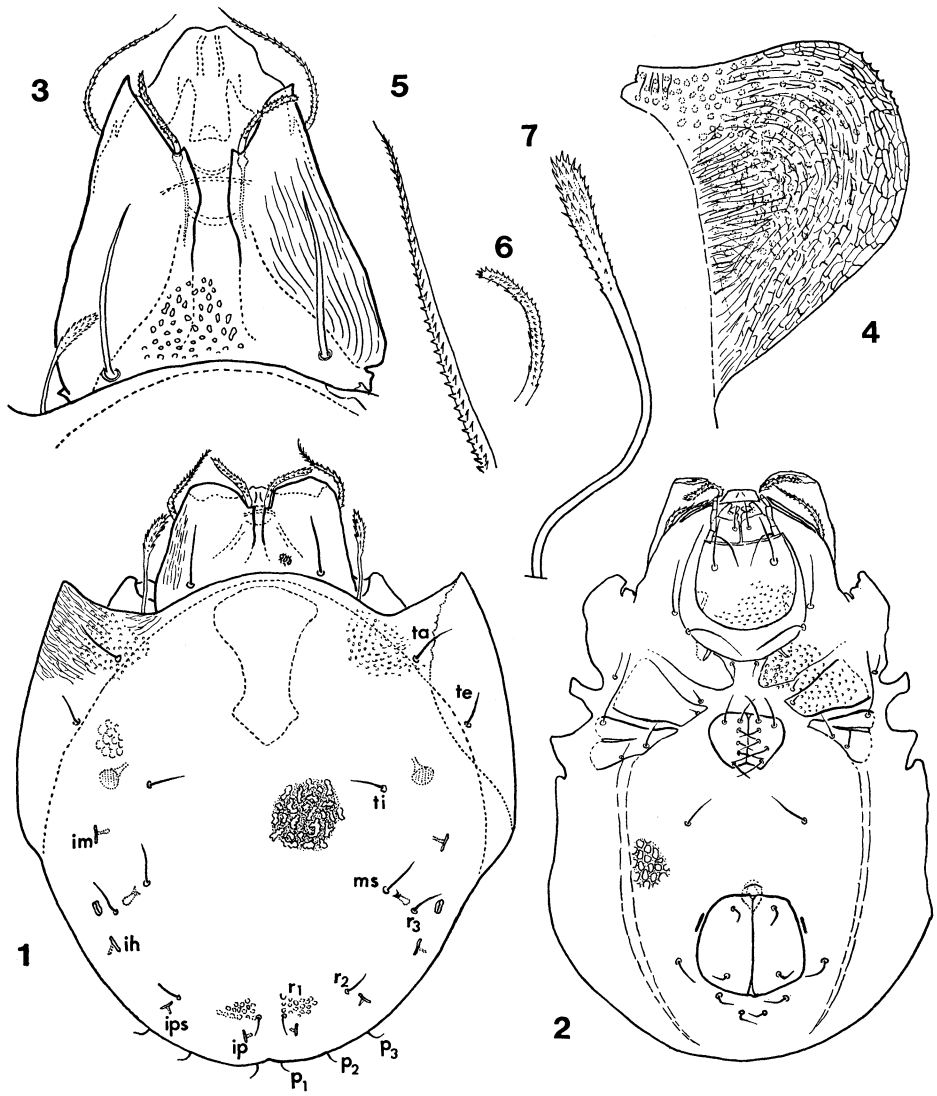
Austrachipteria pulla n. sp.

(Figs. 1-11)

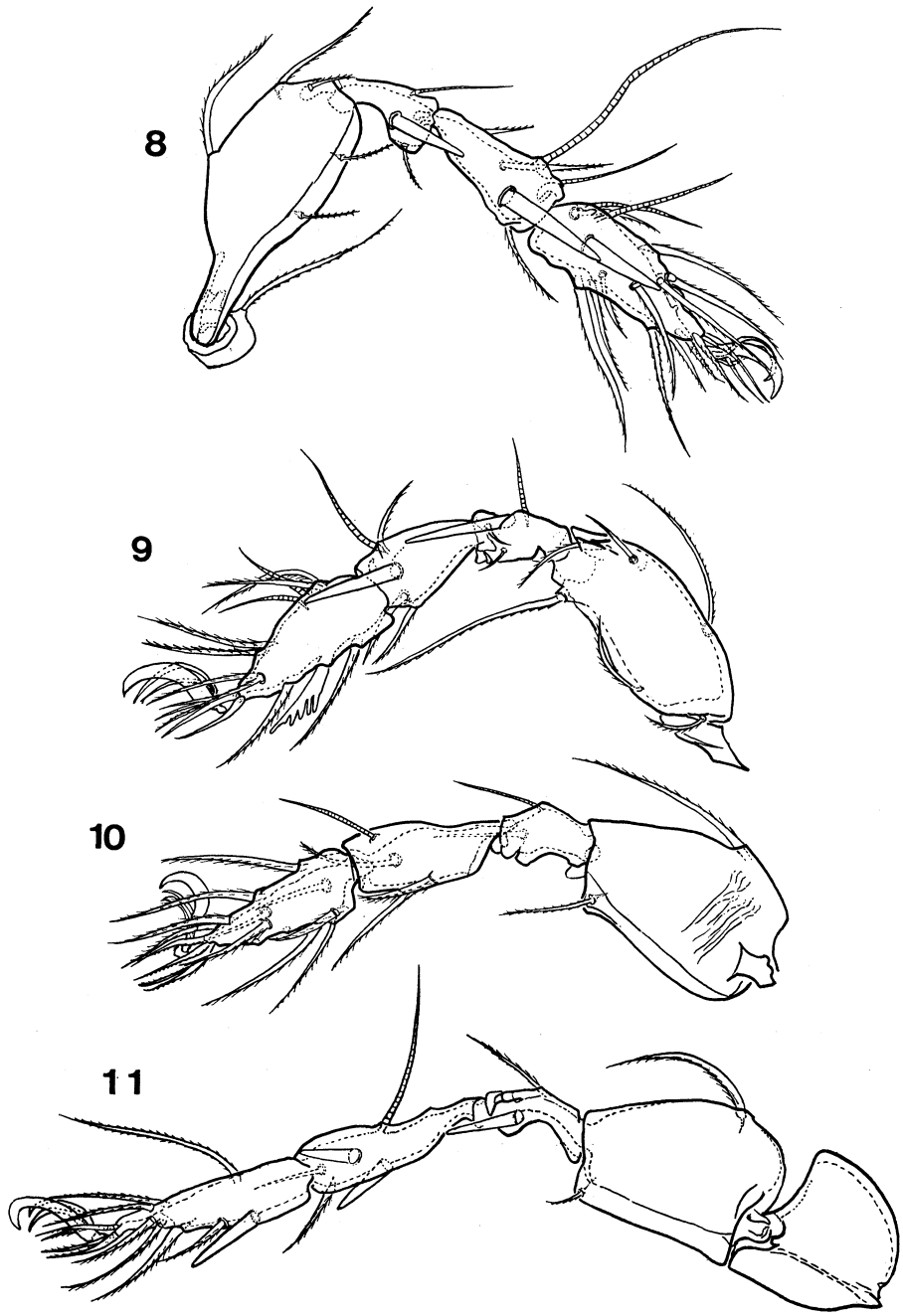
Measurement. Body length: 750 (786) 820 μm; width: 590 (642) 730 μm.

Prodorsum. Lamellae very broad, covering most part of prodorsum, leaving a narrow interspace between them, and being similar in shape to those of the genus *Achipteria*. No translamella is present. Surface of lamella wrinkled longitudinally except in apical part. Lamellar cusp appears to be short and rounded at tip, because it strongly curved downward (Fig. 1); depressed specimens show that at is fairly long and cut at tip obliquely and bears a minute inner dent (Fig. 3). Lamellar seta barbed, inserted at the anteromedian corner

of lamellar cusp, the setal tip just reaching the tip of cusp (Figs. 3 and 6). Rostral tips show a weak concavity (Fig. 3). Rostral setae inserted ventrally, and have small spines in double rows (Fig. 5). Interlamellar seta smooth, inserted near the basal part of lamella, not reaching the base of lamellar seta (Fig. 3). Posteromedian part of prodorsum covered by irregular granules. Tutorium long



Figs. 1–7. *Austrachipteria pulla* sp. n. 1: Dorsal. 2: Ventral. 3: Prodorsum. 4: Pteromorph. 5: Rostral seta. 6: Lamellar seta. 7: Sensillus.



Figs. 8-11. *Austrachipteria pulla* sp. n. 8: Leg I. 9: Leg II. 10: Leg III. 11: Leg IV.

and slender. Sensillus is a slender club, the distral portion being densely barbed (Fig. 7); it directed anteriorly and obliquely upward, so that it appears to be shorter than it is (Fig. 1).

Notogaster. Color dark, almost black; the surface being irregularly foveolate, and granulate in marginal part. Pteromorph appears in dorsal view to protrude beyond the outline of notogaster as a low trapezoidal structure, because it is strongly curved ventrally (Fig. 1); in depressed specimens actual shape shows rather rounded margin, which is serrated near the anterolateral corner (Fig. 4); surface of pteromorph showing dense network and partly granules.

Ten pairs of notogastral setae and 4 pairs of lyrifissures. A pair of gland opening. In addition to them, a large, dark-colored funnel-like inner structure found lateral to seta *ti*, and an elongate sac-like structure between setae *ms* and r_3; they must be denoted as sacculi *Sa* and S_1, respectively, but they do not seem to have exit on the notogastral surface. All notogastral setae smooth and short. Setae p_1, p_2 and p_3 shorter than the remaining. An elongate lenticules (wider anteriorly) observed anteromedially.

Ventral side. Genital aperture a little wider than long. Genital plate with 6 setae which are longer than anal setae. A pair of aggenital setae long. Anal aperture a little longer than wide. Anal plate with 2 small setae. Three pairs of adanal setae; ad_1 and ad_2 situated posterior to and ad_3 lateral to anal opening. A pair of lyrifissures *iad* aligned parallel to lateral margin of anal opening. Epimeral setation: 3-1-3-2. Ventral plate has a pair of longitudinal grooves of light color, between which the surface shows a network-like structure.

Leg. Leg chaetotaxy (Fe-Ge-Ti-Ta)— I : 6-2(1)-4(2)-18(2), II : 5-3(1)-4(1)-13(2), III : 3-1(1)-3(1)-14, IV : 2-2-3(1)-12. Each one seta on tarsi I and IV, tibiae I and II, genua I, II and IV, and 2 setae on tibia IV becoming smooth, strong spine(s). One of ventral setae of tarsus II specialized in another way, bearing several strong branches. Solenidia on leg I more than twice as long as those on leg II.

Type-series. Holotype (NEMT-Ac9698): Ohnogahara in Nomura-cho, Ehime Prefecture, Shikoku, from green mosses growing on tree trunk in *Fagus crenata*-forest, 23-V-1984, Y. HONDA.—3 paratopotypes: the same data as holotype; 6 paratypes: Odamiyama in Oda-cho, Ehime Prefecture, Shikoku, from green mosses growing on trunks of several species of trees, 20-V-1984, Y. HONDA. The type-series is deposited in the collection of National Science Museum, Tokyo.

Remarks. In the generic diagnosis of the genus *Austrachipteria* from Australia BALOGH and MAHUNKA (1966) mentioned "Neither areae porosae, nor sacculi visible". BALOGH (1972) included later, however, the genus *Austrachipteria* in his group "sacculonotic-immovable-synlamellata", having suggested that the mite of the genus has sacculi. Considering this treatment reasonable and the sacculi-like structures of our species real sacculi, our new species must be placed in the genus *Austrachipteria*. The type-species, *Austrachipteria lamellata* BALOGH et MAHUNKA, 1966, differs from the new species in (1) the lamellar cusp with a prominent median projection, (2) the long interlamellar seta reaching insertion of lamellar seta, and (3) the pteromorph with an angulation on the anteroventral corner.

摘　　要

青木淳一（横浜国立大学環境科学研究センター，土壌環境生物学研究室，〒240 横浜市保土ケ谷区常盤台 156)。本田善之（愛媛大学農学部応用昆虫学研究室，〒790 松山市樽味 3-5-7)：四国から発見されたササラダニの一新種，クロカッチュウダニ。

ツノバネダニ科の *Austrachipteria* 属はオーストラリアから知られ，現在までに 1 種で代表されていたが，今回，四国大野ケ原において樹幹に生じたコケから本属の 2 番目の種，クロカッチュウダニ（黒甲冑蜱）*Austrachipteria pulla* sp. n. が見いだされたので記載，報告した。属の模式種 *A. lamellata* BALOGH et MAHUNKA とは縦桁の先端の外方の突起が大きいこと，翼状突起の外縁に鋸歯があることなどによって容易に区別される。

References

BALOGH, J., 1972. The Oribatid Genera of the World. 188 pp.+71 pls., Akadémiai Kiadó, Budapest.

BALOGH, J. & S. MAHUNKA, 1966. New oribatids (Acari) from Australian soils. *Rov. Közlem. Fol. ent. Hung.* N. S. **19**: 553-568.